Status of ORNL Analytical Methods & Nuclear Data NCSP Work Elements

25 March 2004

RM Westfall

DOE Nevada Support Facility

ORNL Analytical Methods

- **SCALE 5.0 Software Frozen, Documentation Almost Complete**

- **Major New Features: TSUNAMI, SMORES, CENTRM, GeeWiz, GUI, JAVAPENO Graphics, TRITON 2D Depletion**

- **ENDF/B-VI 238 Group Library Release in FY04**

- **Three SCALE Workshops in April, May 2003**

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ORNL Analytical Methods

- **SCALE CSAS Sequence for Prototypic Point KENO Under Development**

- **SCALE Sequence for GLSSM Sensitivity Analysis Under Development**

- **Progress In AMPX Development, Probable Release in FY05**

ORNL Nuclear Data

- **U-238 Resolved Resonancece Evaluation to 20keV**
- **K-39, K-41 Evaluation in Progress, Will Perform Additional Capture Measurements**
- **Formats for Uncertainty Files Adopted by CSEWG**
- **Retroactive & Forward Covariance Evaluations Being Performed**
- **Unresolved Resonance Parameters for the Actinides Under Improvement (Effort With LANL)**

ORNL Nuclear Data

- **Manganese Measurements Delayed Due to Problems With ORELA**

- **Upgrading PUFF Covariance Processor Delayed, Staff Commitments**

- **Open Requisition for Additional ORNL Staff Position, Candidate Evaluation Underway**

- **Guest Assignment for European Data Specialist**

Three Problem Areas

- **Delay in ORELA Operations Due to Equipment Failures**

- **Delay in the Release of SCALE Version 5.0**

- **Integration of DOE Technology Needs Into the NDAG Evaluation Process**

DOE Program Specific Applications

- **EM Work Commenced in July, Bridged FY Funding Problems, FY04 EM funding Approved**

- **Substantial Progress on EM Efforts: Methods, Data, Studies, Training**

- **Major New Application Area in Space Nuclear Work for DOE/NE, Potentially for NR (JIMO Mission)**

- **Additional NCSP Technology Application Work for DOE/RW in Enhancing Technical Bases for Burn-up Credit**

- **Early Collaborative Effort With EURATOM on Pb-206 Measurements & Evaluation, DOE/NE Gen-IV Reactor & AFCI Applications**

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